

## GeoRef Search 10816510

8/17/2006

pluronic and diffuser

Pluronic L81

chemical and bubble and coalescence

bubble and curtain and seismic

bubble and curtain and coalescence

bubble coalescence surfactant

acoustic or seismic wave propagation in bubble curtain

bubble diffuser chemical coating

size reduction of bubble seismic

bubble size coalescence

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	607	pluronic and wetting and agent and bubble	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/17 10:34
S2	5	S1 and diffuser	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/10 15:03
S3	44	laake.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/10 15:34
S4	3085	bubble and rise and wetting and agent	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/10 15:35
S5	63	bubble and (rise adj time) and wetting and agent	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/10 15:41
S6	1214	seismic and (near-surface or ("near" adj surface) or weathering) and frequency	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/10 15:37
S7	254	seismic and (near-surface or ("near" adj surface) or weathering) and frequency and vibrator	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/10 15:38
S8	80	(seismic or acoustic) and (bubble with coalescence)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/10 15:45

## EAST Search History

S9	662	lee.in. and curtain	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/10 15:46
S10	4	lee.in. and curtain and seismic	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/10 15:46
S11	4	("2954090"   "4618024"   "4632213").PN. OR ("6606278"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/10 15:54
S12	3	seismic and (bubble adj diffuser)	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/10 15:55
S13	5	seismic and (bubble adj diffuser)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/10 15:55
S14	12	seismic and (bubble with curtain)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/10 15:55
S15	5	seismic and bubble with diffuser	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/10 15:55
S16	14	S14 S15	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/10 15:55
S17	7	("4398925"   "5117882"   "5613456"   "5688405"   "5831166").PN. OR ("6123044"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/05/10 17:03

## EAST Search History

S18	1086	(bubble with coalescence)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/10 14:59
S19	8	(bubble with coalescence) and (rise adj time)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/10 15:00
S20	21	(bubble with coalescence) and pluronic	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/10 15:03
S21	13	seismic and (bubble with curtain)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/10 15:03
S22	1	seismic and (bubble-curtain)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/10 15:03
S23	13	S21 S22	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/10 15:03
S24	8	"5959938"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/17 10:34
S25	3	"6606278"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/17 10:34

## EAST Search History

S26	10	S24 S25	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/17 10:35
S27	2	"6332507"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/17 10:35
S28	40	("2954090"   "3659713"   "3713540"   "3979289"   "4178245"   "4219423"   "4288321"   "4296884"   "4419232"   "4582048"   "4618024"   "4625302"   "4632213"   "4669972"   "4692059"   "4749479"   "4880333"   "4919820"   "5102261"   "5197821"   "5220958"   "5225622"   "5322629"   "5345741"   "5354456"   "5354459"   "5372711"   "5394786"   "5427679"   "5558462"   "5959938"   "5992104"   "6346193"   "RE36297").PN. OR ("5959938"   "6567341"   "6606278").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/17 10:41
S29	10	("2757356"   "2954090"   "3943484"   "4087780"   "4397006").PN. OR ("4625302"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/17 10:50
S30	15	("2586706"   "2604954"   "2877859"   "2954090"   "3496532"   "3572462"   "3730289").PN. OR ("4618024"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/17 10:52
S31	21	S29 S30	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/17 11:14
S32	204	367/15.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/17 11:14
S33	82	367/17.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/17 11:14

## EAST Search History

S34	145	367/24.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/17 11:14
S35	157	181/110.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/17 11:40
S36	469	367/141.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/17 11:40
S37	0	"162".ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/17 11:41
S38	117	181/115.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/17 11:48
S39	61	7/162.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/17 11:41
S40	221	367/162.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/17 11:41
S41	3	jones.in. and seismic and bubble	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/17 11:54

## EAST Search History

S42	282	367/154.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/17 11:49
S43	20	"367"/\$.ccls. and (bubble with curtain)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/17 11:49
S44	9	(bubble with curtain) and seismic and chemical	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/17 11:49
S45	25	jones.in. and explosive and bubble	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/17 11:54
S46	2	("2954090").PN. OR ("6571906").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/17 12:32
S47	155	"5141738"	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/17 12:33
S48	3446	drake.in.	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/17 12:33
S49	17680	ross.in.	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/17 12:33
S50	21100	S48 S49	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/17 12:33
S51	581	S50 and bubble	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/17 12:33
S52	4	S50 and bubble and seismic	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/17 12:33
S53	2	seismic and bubble and pluronic	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/17 12:33

## EAST Search History

S54	1	"5141738".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/17 12:53
S55	11	((("3084651") or ("3739869") or ("4045084") or ("4183744") or ("4618024") or ("4625302") or ("5401921") or ("5422043") or ("5513149") or ("5645771") or ("5959938"))).PN.	US-PGPUB; USPAT	OR	OFF	2006/08/17 12:58
S56	0	S55 and pluronic	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/17 13:00
S57	7	"5863501"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/17 13:00
S58	5	seismic and bubble and curtain and surfactant	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/17 13:04
S59	17	(US-4006795-\$ or US-4618024-\$ or US-5359575-\$ or US-5959938-\$ or US-6489707-\$ or US-6123044-\$ or US-5321668-\$ or US-5130948-\$ or US-6606278-\$ or US-6567341-\$ or US-4625302-\$ or US-4921068-\$ or US-5992104-\$ or US-6571906-\$ or US-5422043-\$ or US-5863501-\$).did. or (US-2954090-\$).did.	USPAT; USOCR	OR	ON	2006/08/17 14:39
S60	1	S59 and surfactant	USPAT; USOCR	OR	ON	2006/08/17 13:25
S61	67650	(bubble withdiffuser) and coating	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/17 14:40



## EAST Search History

S62	286	(bubble with diffuser) and coating	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/17 14:40
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